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$$\vec{E} = \left(6.0\times10^{-3}\,\frac{V}{m}\right)\sin\left[2\pi\left(\frac{x}{18\,m} - \frac{t}{6.0\times10^{-8}\,s}\right)\right]\hat{j}$$

Assume the wave is traveling in the $+\hat{i}$ direction,
Then the magnetic field will be in the $+\hat{k}$ direction.

the ~~magnitude~~ amplitude of the magnetic field is

$$c = \frac{E}{B} \rightarrow B = \frac{E}{Bc} = \frac{6.0\times10^{-3}\,\frac{V}{m}}{3.0\times10^{8}\,m/s} = 2.0\times10^{-11}\,T$$

$$\therefore \boxed{\vec{B} = \left(2.0\times10^{-11}\,T\right)\sin\left[2\pi\left(\frac{x}{18m} - \frac{t}{6.0\times10^{-8}\,s}\right)\right]\hat{k}}$$

The Poynting vector is Then

$$\vec{S} = \frac{\vec{E}\times\vec{B}}{\mu_0} = \frac{\left(6.0\times10^{-3}\,\frac{V}{m}\right)\left(2.0\times10^{-11}\,T\right)}{4\pi\times10^{-7}\,\frac{T\,m}{A}}\sin\left[2\pi\left(\frac{x}{18m} - \frac{t}{6.0\times10^{-8}\,s}\right)\right]^2$$

$$= \left(0.0955\,\frac{V\cdot T}{m}\,\frac{A}{T\,m}\right)\sin\left[2\pi\left(\frac{x}{18m} - \frac{t}{6.0\times10^{-8}\,s}\right)\right]^2\hat{i}$$

Look at the units

$$\frac{V\cdot T}{m}\cdot\frac{A}{T\,m} = \frac{V\cdot A}{m^2}$$

But voltage time current is Power in watts

$\therefore$ The units are $\frac{W}{m^2}$ which is consistent with intensity

$$\boxed{\vec{S} = \left(0.0955\,\frac{W}{m^2}\right)\sin\left[2\pi\left(\frac{x}{18m} - \frac{t}{6.0\times10^{-8}\,s}\right)\right]^2\hat{i}}$$